



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8**

1595 Wynkoop Street
Denver, CO 80202-1129
Phone 800-227-8917
www.epa.gov/region08

Ref: 8EPR/N

DEC 15 2014

Ms. Deb Benford
NEPA Program Manager
Directorate of Public Works
Environmental Division
16126 Evans Street, Bldg 1219,
Fort Carson, CO 80913-4362

Re: Piñon Canyon Maneuver Site
Draft Environmental Impact Statement
CEQ # 20140313

Dear Ms. Benford:

The U.S. Environmental Protection Agency Region 8 has reviewed the Piñon Canyon Maneuver Site Training and Operations Draft Environmental Impact Statement (EIS) prepared by the U.S. Army Environmental Command and Fort Carson. Our comments are provided for your consideration pursuant to our responsibilities and authorities under Section 102(2)(C) of the National Environmental Policy Act (NEPA), 42 U.S.C. Section 4332(2)(C), and Section 309 of the Clean Air Act, 42 U.S.C. Section 7609.

Based on the EPA's procedures for evaluating potential environmental impacts on proposed actions and the adequacy of the information, the EPA is rating the preferred alternative an EC-2 (Environmental Concerns - Insufficient Information). This letter documents the EPA's concerns and recommendations for the Final EIS. A full description of the EPA's rating system can be found at www.epa.gov/compliance/nepa/comments/ratings.html.

PROJECT BACKGROUND AND DESCRIPTION

The Piñon Canyon Maneuver Site (PCMS), acquired by the U.S. Army in 1983, is a military training site for Fort Carson, Colorado, located near Trinidad in southeastern Colorado. Its approximately 235,000 acres support readiness training for units up to brigade size (i.e., 4,300 to 4,600 soldiers). The Army prepared an EIS for Training Land Acquisition in 1980. In 2003, the Army began a process to acquire additional land and published a Final EIS and Record of Decision (ROD) in 2007. However, litigation occurred regarding the decision and in 2013 the Department of Defense repealed the 2007 land acquisition waiver for the Army to add more land to PCMS, thus eliminating the potential for expansion. The Army prepared this EIS because new weapons systems and training methods have been developed

since the original 1980 EIS.

The land terrain is primarily rolling prairies and semi-arid, basaltic hills. PCMS is bounded by the Comanche National Grassland to the north and privately owned agricultural land used mostly for dryland cattle grazing on the other three sides.

The purpose and need for this NEPA document is to train Fort Carson Brigade Combat Teams in full brigade-size exercises at PCMS, which offers large maneuver and training areas with complex terrain. The PCMS Draft EIS analyzes two action alternatives along with the no action alternative. The Army proposes continuing brigade level training at PCMS for armored and infantry brigades; enabling the Stryker brigade and its newer family of vehicles to train at PCMS; and upgrading brigade training rotation, equipment composition and training methods in Alternative 1A. Alternative 1B, the preferred alternative, enhances 1A by adding new training and infrastructure including the following:

- Aviation gunnery and flare training
- Electronic jamming systems
- Laser targeting
- Demolitions training
- Unmanned aerial systems training
- Unmanned ground vehicle training
- Airspace reclassification
- Drop zone development

These training activities would not exceed 4.7 months per year.

ENVIRONMENTAL CONCERNS

The EPA commends the Army for using regions of influence and significance thresholds in the analysis of environmental and social impacts for training and operations at the PCMS. The EIS states that there could be significant impacts to soil, water and biological resources. Following are our comments regarding our concerns.

Water Quality

The Draft EIS indicates that the proposed action alternatives would significantly impact water resources (Sections 3.6 and 4.3.5), but that those effects can be reduced to less than significant through “enhanced application of existing land management programs, training land rotation, and continued RTLA and LRAM efforts” (p. 3.6-23). The Draft EIS does not describe these mitigation activities in enough detail to understand the adjustments and/or enhancements that will be made or whether they are likely to be effective at reducing impacts to water resources. The EPA recommends providing details about these mitigations in the Final EIS.

Section 3.6.1.2, Wetlands, p. 3.6-3

This section indicates that 361 acres of wetlands are within PCMS based upon a 2004 National Wetlands Inventory Database and references a Clean Water Act (CWA) Section 404 regional general permit number 14. It is not clear if wetland impacts from the enhanced training activities or proposed mitigation activities described in the Draft EIS would also be covered by this permit or if an individual permit

might be required. Changes in the amounts of affected Waters of the U.S. can sometimes affect the applicability of CWA Section 404 general permits. Please clarify whether regional general permit 14 covers the proposed actions.

Additionally, this section does not describe what portion of the 361 acres of wetlands are jurisdictional under the CWA and, therefore, covered by the regional general permit number 14, and what portion are non-jurisdictional. If regional general permit number 14 does not cover all 361 acres, then we recommend clarifying whether the proposed actions will affect the entire 361 acres or just a portion.

Section 3.6.1.3, Surface Water Quality, p. 3.6-3

The section on selenium sources focuses on fossil fuel usage and “natural weathering.” This section does not identify return flows and seepage, which are two major selenium sources in southern Colorado and the Arkansas River Basin specifically. The EPA recommends discussing the effect of return flows and seepage on selenium concentrations in the Arkansas River Basin and in the project area.

The intent of the sentence “No government standards/regulations exist for terrestrial and non-point sources of selenium” is unclear. Chronic and acute water quality standards exist for selenium and apply to the in-stream (or in-lake) water quality independent of the source.¹ Some stormwater is regulated by the CWA through its National Pollutant Discharge Elimination System permitting program and, therefore, must meet water quality standards. Other stormwater may be covered by an applicable total maximum daily load (TMDL). We understand that at this time there are no TMDLs for the impaired waterbodies at or near PCMS. The EPA recommends clarifying this sentence in the final EIS.

The Draft EIS identifies the iron impairment in Timpas Creek, but does not address whether the project is the cause of, or has potential to contribute to, this problem. Please describe sources of the iron impairment, if known, and what activities may cause or contribute to this impairment. If this project may cause or contribute to this impairment, describe how that contribution may be minimized or offset.

The Army’s use of land rotation for its maneuver practices will help reduce impacts from these activities. However, how much of the land will be in a degraded condition at any one time is unclear. If there is a high need to conduct maneuvers, most of the available land designated for these activities could be in a degraded condition. The Draft EIS implies that when a particular area has recovered from previous impacts, it could be affected again by additional maneuver activities. This scenario should be considered when evaluating erosion and sedimentation impacts on water quality. Please add a discussion that addresses this situation in the Final EIS.

Section 3.6.1.3, Surface Water Quality p. 3.6-4

Table 3.6-1 does not include all of the water quality standards applicable to segment 7 of the Purgatoire River. Please include all applicable metal parameters and assess whether or not the proposed actions will have impacts.

¹ 5 CCR 1002-32: Classification and Numeric Standards for the Arkansas River Basin, [ftp://ft.dphe.state.co.us/wqc/wqcc/Current%20Water%20Quality%20Standards/Currently%20Effective%20Standards/32_Arkansas_Effective_4-30-2014/32_2014\(04\)tables.pdf](ftp://ft.dphe.state.co.us/wqc/wqcc/Current%20Water%20Quality%20Standards/Currently%20Effective%20Standards/32_Arkansas_Effective_4-30-2014/32_2014(04)tables.pdf)

Section 3.6.1.3.2, Water Quality Monitoring, p. 3.6-6

Tables 3.6-4 and 3.6-6 summarize water quality data but do not compare those data to relevant water quality standards. Similarly, Table 3.6-8, which does relate some of the available instream data to water quality standards, does not specify how an exceedance was determined. The EPA recommends adding a comparison to relevant water quality standards based upon the Colorado Department of Public Health and Environment's assessment method.²

Section 3.6.2.3.5 – (Proposed Action Alternative 1B) Demolitions Training

This section acknowledges that the use of explosives could contaminate soils and waters within blast zones, but that those constituents are likely to dissipate. Table 3.6-8 identifies 11 exceedances out of 46 samples of nitrate plus nitrate as nitrogen on the Purgatoire River near Timpas Creek and 10 exceedances out of 42 samples the Purgatoire River near Thatcher, Colorado. While the basis for determining "sample exceedances" (thresholds, metrics, and methodology used) is not stated, this information suggests that additional contributions of nitrogen to this watershed could be problematic and warrants further consideration. The EPA recommends the following: (1) clarifying the basis for the determination of "sample exceedances", (2) comparing water quality data to the State's numeric nitrogen criteria,³ and (3) considering whether or not the use of explosives is likely to contribute to nitrogen problems in the Purgatoire River or its tributaries and whether the Army should undertake nitrogen monitoring if it is not already doing so.

Section 5.2, Proposed Mitigation, p. 5-9

The information presented in Table 5-2 of this section relates to information presented in Section 2.5. Neither section contains enough information to understand whether the proposed mitigation is likely to reduce or offset effects. The table identifies that additional measures may include stormwater devices in strategic locations. The studies referenced on p. 3.6-11 suggest this may be effective. There is not enough information to fully assess the specific utility of this type of approach for this project. Please add more information to address these concerns in the Final EIS.

Section 2.5, Existing PCMS Training Protocol and Range Management, p. 2-36 – 2-44

Section 2.5.1.1 indicates that training mission site selection and planning considers "climatic, biological and cultural resource conditions" (p. 2-37). It is unclear whether these factors include water resources. It also indicates that mitigation for environmental impacts is incorporated into its training, but does not specify those activities or the thresholds that the activities are targeting (p. 2-37). Please add a discussion addressing these issues in the Final EIS.

Section 2.5.2 indicates that long-term monitoring data for vegetation, streamflow and streamflow quality are utilized to determine the suitability of land for specific training exercises and are factored into training plan development. It is unclear what data are collected or how these data are considered or used to inform decisions. It appears that there are opportunities for these data to be used and considered. For

² <https://www.colorado.gov/pacific/cdphe/wqcc-reports-and-plans>

³ ftp://ft.dphe.state.co.us/wqc/wqcc/Current%20Water%20Quality%20Standards/Currently%20Effective%20Standards/31_SurfaceWaterBasicStandards_Effective_1-31-2013/

example, Sections 2.5.2.3 describes how vegetative cover can lead to an area being designated as limited-use or off-limits and Section 2.5.3 describes quantification of impacts in maneuver miles based upon the training event mileage (pp. 2-41 and 2-42). Additionally, Section 2.5.3.2 describes a specific example of when impacts needed to be identified prior to a brigade-level training in late winter/early spring 2013.

The EPA recommends that the Final EIS include more specificity about the data collected, parameters, locations and the frequency of collection, and adding this information to Tables 3.6-3 and 3.6-4. In addition, please describe how these data are factored into training plan development.

- What thresholds drive determinations about acceptable or unacceptable levels of impacts? Is it only vegetative cover? Could other types of data such as vegetative diversity, biomass, streamflow or water quality be factored in to enhance the Army's attainment of its environmental goals?
- Do environmental thresholds lead to categorization of an area as limited-use, off-limits, or dismantled-only or help determine the rotation schedule?
- Have maneuver mile-based impacts been related to environmental impacts (e.g., loss of vegetation, increased runoff or erosion)?
- Explain methods to evaluate the acceptability and effectiveness of current mitigation and training implementation, including rotation, based upon environmental data. If these methods do not exist, please consider developing them.

Mitigation

Section 2.5.1.2 details the mitigations that would occur before units could officially clear a training area after they have completed their training activities. They are:

- Mitigate ruts and ridges greater than boot height
- Fill in excavations
- Identify and mitigate for severed trees
- Remove trash
- Mitigate damage to tank trails and roads
- Clean up gray water pits
- Remove any wire, stakes or brass
- Coordinate removal of portalets
- Clean up remaining spill residues
- Ensure all trash and debris are placed in dumpsters
- Mitigate any excessive maneuver damages

If an area is substantially damaged, the Army has committed to rehabilitate and restrict the area from most uses until it has a minimum of 65 to 70 percent vegetative cover. However, the Draft EIS indicates in several places (e.g., 3.5-30 and 3.6.1.3.2) that mitigation efforts depend on funding of the Land Condition Trend Analysis (LCTA) and the Land Rehabilitation and Maintenance (LRAM) programs. The EPA is concerned about whether or not the Army will be able to follow through with its commitment to rehabilitate and restore the land that has been damaged during training activities if funding is unavailable. The EPA recommends developing a backup plan to ensure mitigation will be implemented in the event these funding sources are not available.

General

Many environmental documents and plans are referenced throughout the Draft EIS (e.g., the Integrated Natural Resources Management Plan and the Stormwater Management Plan) that have processes in place to mitigate environmental impacts. These documents can be found on the Fort Carson website, but they may be difficult to access for the lay reader. The EPA recommends that the Final EIS include the website link each time a document or plan is referenced.

Thank you for the opportunity to provide comments on the Piñon Canyon Maneuver Site Draft EIS. If you have any questions or would like to discuss our comments, please contact me at 303-312-6704 or Carol Anderson of my staff at 303-312-6058.

Sincerely,



Philip S. Strobel
Acting Director, NEPA Compliance and Review Program
Office of Ecosystems Protection and Remediation